



## Montana Communicable Disease Weekly Update: 04/02/10

### DISEASE INFORMATION

**Summary – Week 12 – Ending 03/27/10** – Disease reports received at DPHHS during the reporting period March 21-27, 2010 included the following:

- Vaccine Preventable Diseases: Invasive *Streptococcus pneumonia* (1), Varicella (4),
- Enteric Diseases: Campylobacteriosis (4), Cryptosporidiosis (2), Giardiasis (9), *Escherichia coli* O157:H7 (STEC) (2), non-O157 STEC (3), Salmonellosis (3), Shigellosis (1)
- Other Conditions: none
- Travel Related Conditions: none

*NOTE: The report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this week; (4) clusters and outbreaks; and (5) an STD summary.*

### **Surveillance Snippets – Serologic Testing for Acute Infection**

Some diseases are detected using serologic assays. Many of these diseases like vector-borne diseases, and many vaccine preventable diseases, require TWO blood specimens in order to confirm that the disease in question is recently acquired. IgM and IgG antibodies in the blood are measured to determine whether a person's infection is recently acquired.

- In general, a high IgM titer is an indicator of a specific and recent infection.
- However, IgG is also used to confirm a recent infection. A four-fold increase in the IgG titer from the time an acute specimen is drawn (within one week of onset of disease) to when a convalescent specimen is drawn (2-4 weeks after onset of disease), indicates a recent infection.
- When testing for a recent infection, IgM AND IgG testing on paired sera (acute/convalescent) is best.

Disease Status	IgM	Acute IgG	Convalescent IgG
Recent infection	High	Not present or low	Four-fold increase
Past Infection	Low or not detectable	Present	No or slight increase

\* General information; disease specific criteria should be used when determining timing for IgM and IgG testing

Many thanks to Denise Higgins, Montana Public Health Laboratory, for her assistance in writing this "snippet".

### **THE "BUZZ"**

#### Influenza

**Montana** – Activity level in Montana for week 12 is **NO ACTIVITY. IMPORTANT! Interpret positive rapid influenza tests with caution at this time.** A positive screening test result is most likely to be truly positive during periods of peak influenza activity in the population tested. A positive screening test result is most likely to be falsely positive during periods of low influenza activity in the population tested, including early and late in the influenza season. Per IDSA Guidelines, a confirmatory test such as PCR or viral culture should be considered (<http://www.journals.uchicago.edu/doi/pdf/10.1086/598513>). Current information on influenza testing by the Montana Public Health Laboratory can be found at <http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml>.

**NEW! Influenza in Pregnancy** - Attached is a publication from the MMWR about H1N1 infection among pregnant women in NYC that identifies both increased risk for hospitalization and ICU admission compared to non-pregnant women, as well as several missed opportunities for prevention. Current recommendations for treatment and prevention of influenza in pregnant women are available at [http://www.cdc.gov/H1N1flu/pregnancy/antiviral\\_messages.htm](http://www.cdc.gov/H1N1flu/pregnancy/antiviral_messages.htm)

**United States** - During week 12 (03/27/10), influenza activity remained at approximately the same levels as last week. (<http://www.cdc.gov/flu/weekly/usmap.htm>)

## **Diarrheal Disease and Food Recalls**

**Hydrolyzed Vegetable Protein Product Recalls** - The U.S. Food and Drug Administration continues to investigate findings of *Salmonella* Tennessee in hydrolyzed vegetable protein (HVP) manufactured by Basic Food Flavors, Inc., in Las Vegas, NV. HVP is a flavor enhancer used in a wide variety of processed food products, such as soups, sauces, chilis, stews, hot dogs, gravies, seasoned snack foods, dips, and dressings. **At this time, no illnesses associated with this contamination have been reported to the FDA; however, multiple food products are involved in this recall.** Updates to the recall list can be found at: <http://www.fda.gov/Safety/Recalls/MajorProductRecalls/HVP/default.htm>.

## **INFORMATION / ANNOUNCEMENTS**

**NEW! Animal Bites to Humans on the Increase** - As spring progresses into summer, human and domestic pet interaction with wildlife increases. Though it may be tempting to handle or assist distressed wildlife, abnormal wildlife behavior in species like bats, skunks, and foxes (e.g., nocturnal animal out in the daytime, lethargic, or aggressive) may be a sign of rabies infection. Rabies infections are sometimes detected in MT wildlife and transmission to domestic pets and humans through the saliva of an infected animal is possible. Report all animal bites or possible rabies exposures to the local health department.

As of April 2, 2010, there were no reports of rabies positive animals in Montana for 2010.

For more information about rabies, and a summary of the current recommendations for rabies postexposure prophylaxis (PEP) visit: <http://www.cdc.gov/rabies/index.html>

**NEW! Hantavirus** - Hantavirus is transmitted to humans through exposure to infected rodent tissues or excrement, including dried feces. Hantaviruses can cause a rare but deadly disease called hantavirus pulmonary syndrome (HPS). People get HPS when they breath in hantaviruses. This can happen when rodent urine and droppings that contain a hantavirus are stirred up into the air. People can also become infected by touching their eyes, nose, or mouth after they touch rodent urine, droppings, or nesting materials that contain the virus. HPS may also be transmitted through a mouse or rat bite. Activities that can put people at risk for HPS include: Improperly cleaning up mouse and rat urine, droppings, and nests, cleaning a shed or cabin that has been closed for some time, and working in areas where mice and rats may live (such as barns). To prevent exposure to hantaviruses, rodents should be excluded from the home place, and the following precautions should be used when cleaning areas where rodents may reside:

- Wear rubber or plastic gloves when cleaning rodent infested areas
- Spray urine and droppings with a disinfectant or a mixture of bleach and water thoroughly soaking the area, and let stand for 5 minutes
- Use a paper towel to wipe up the urine or droppings and discard in the garbage
- Mop or sponge the area with a disinfectant or bleach solution
- Wash gloved hands with soap and water or spray a disinfectant or bleach solution on gloves before taking them off
- Wash hands with soap and warm water after taking off your gloves.

For more information about hantaviruses, visit: <http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm>

**NEW! Hepatitis Information** -The National Training Center for Integrating Hepatitis into HIV/STD Prevention Services ([www.KnowHepatitis.org](http://www.KnowHepatitis.org)) has two new documents:

### **ABC's of Hepatitis - Information for the Front Line Worker**

by Laura Bachmann, MD, MPH - Associate Professor of Medicine, Wake Forest University

<http://www.knowhepatitis.org/abcstraining>

### **IOM Report: A National Strategy for Prevention and Control of Hepatitis B and C**

by John W. Ward, MD – Director of the Division of Viral Hepatitis, CDC

<http://www.knowhepatitis.org/iom>

**NEW! Communicable Disease Summary: A Guide for Schools** – The Communicable Disease Summary: A Guide for Schools will be mailed to all Montana K-12 schools, local health departments and infection preventionists soon. The guide is available at: <http://www.dphhs.mt.gov/PHSD/epidemiology/schools.shtml>

## **24/7 AVAILABILITY**

The Communicable Disease Epidemiology program is available 24 hours a day/7days a week/365 days a year. Please call 406.444.0273 if you need immediate communicable disease epidemiology assistance. The answering service will take a message and we will return the call as quickly as possible.

*This newsletter is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: <http://cdepi.hhs.mt.gov>.*